

## General Information

Manufacturer	Osworld Scientific Equipments Pvt. Ltd, Mumbai, India
Product	Stability Chamber with Vaporizer Technology
Brand	Osworld
HSN code	84198960
Model	Stability Chamber Economy Super Saver
Type	Vertical, front opening, complete assembled unit, plug to start.
Application	Stability study meets ICH guidelines and USFDA requirements .
Certification / Registration	ISO 9001 : 2015 audited by BVQI GST: 27AABCO0610N1ZK SME: 27221200666 IEC : 0308048806 Calibration: ERTL Certificate

## Product Highlights

Parts	Brand, COO	Salient Features
Stainless steel	Jindal, India.	Zero water drain Zero water loss
Controller	Fuzi, Japan	Humidity generated with water virtually at ambient temperature
Temperature sensor	IST, Switzerland.	Eco-friendly: negligent room heating
Humidity sensor	Humirel, France.	Heat load no greater than a domestic refrigerator
Door gasket	GCF- Secure,UK.	0.7 litre water consumed in 24-hour cycle
Door handle / hinges	Heyritz, Germany.	Functions within a warm room atmosphere. Saves power: Electrical energy consumption of 0.6 unit per hour. No air conditioning required to maintain room temperature

## Key Specifications

For conditions as per ICH guidelines

Long-Term Testing Conditions			
Climatic Zone	Temperature	Humidity	Minimum Duration
Zone 1	21°C ± 2°C	45% RH ±5% RH	12 months
Zone 11	25°C ± 2°C	60% RH ±5% RH	12 months
Zone 1Va	30°C ± 2°C	65% RH ±5% RH	12 months
Zone 1Vb	30°C ± 2°C	75% RH ±5% RH	12 months
Refrigerated	5°C ± 3°C	No humidity	12 months

Accelerated and Intermediate Testing Conditions			
Climatic Zone	Temperature	Humidity	Minimum Duration
Accelerated Ambient	40°C ± 2°C	75% RH ±5% RH	6 months
Accelerated Refrigerated	25°C ± 2°C	60% RH ±5% RH	6 months
Accelerated Frozen	5°C ± 3°C	No humidity	6 months
Intermediate	30°C ± 2°C	65% RH ±5% RH	6 months

Temperature range / resolution : 20.0°C to 60.0°C / 0.1°C

Temperature accuracy / uniformity : ± 0.5°C / ±1°C

Humidity range / resolution : 55% to 80% RH / ±1%

Humidity accuracy / uniformity : ±1% RH / ±3% RH

## Technical Specifications

Construction	Double wall with Polyurethane (PUF) insulation. Working chamber made of Stainless steel 304 grade mirror finish. Outer cabinet made of stainless steel 304 grade matt finish.
Temperature / Humidity control	Microprocessor based PID control with auto tuning
For Data storage logging device(Optional)	Data storage of 1000 / 1500 readings in FIFO mode. Password protected user management entries. Password protected with memory for data storage. Printer connectivity through RS 485 communication PC connectivity through MODBUS protocol RTC / date / month settable. Log interval selectable Print period to and from selectable
Cooling	CFC Free Copeland Make compressor with R 134A eco friendly refrigerant, with condenser, motor, relay complete unit.
Steam Injection	Steam generator bath with reservoir made of thick stainless steel with heater, water inlet control, low water level safeguard and insulation
Heating	U' Shaped Nichrome wire heater in SS sheathing
Temperature sensor	PT100 RTD Class 'A'.
Humidity sensor	Make HUMIREL made in France, capacitance type. High reliability and long term stability Calibrated within +2% RH @ 55% RH
Air circulation	Flange motor with impeller.
Insulation	Poly Urethane Foam (PUF)
Chamber illumination	Fluorescent light with door switch.
Feet	Castor wheels.
Shelf	SS wire mesh heavy duty.
Electrical	230V / 15A / 50 Hz.

## Safety Features

Temperature	High temperature safety cut off.
Boiler heater	Low water level steam generator cut off.
Compressor	Electrical overload cutoff relay for compressor. Time delay for compressor start.
Electrical	Short circuit protection

## Calibration & Validation Documents

Calibration	Temperature sensor probe calibrated with traceability to ERTL Humidity sensor calibrated with traceability to ERTL Temperature controller calibrated with traceability to ERTL Humidity controller calibrated with traceability to ERTL
Validation Documents	Installation Qualification (IQ), Operational Qualification (OQ) and Performance Qualification (PQ) documentation and protocols shall be provided with the equipment.

## Utilities / Preinstallation Requirement

Power supply	Single phase, 16Amps, 230 Volts AC 50 Hz.
Water	DM water continuous supply through pipeling with valve for boiler input of ½" BSP at 3 feet from ground level.
Drain	Not required.
Room Temperature	No special requirement.

Computer requirements (if software ordered)	Provision of PC in customer scope. Windows-compatible computer with a standard keyboard, a pointer input (i.e., a mouse, track pad, or touchscreen). "Microsoft SQL 2012 free version" to be provided by customer. Windows 7 or above. RAM 8 GB, Hard disk – 500 GB. Microsoft office 7 or higher (Professional is recommended) Processor: Intel I3 or higher. Com port for communication. Acrobat reader (to view PDF files). Ethernet / LAN Connectivity.
Internet connectivity	For software service support remote access through Team Viewer / Any Desk.

### Ordering Information with price

MODEL	Internal Size W x D x H cm	External Size W x D x H cm	Capacity Liters	Watts	SS Shelf
<b>Table top model</b>	50 x 40 x 50	65 x 65 x 105	100	1000	2
<b>Floor model</b>	45 x 45 x 100	60 x 67 x 155	200	1000	3

\*\*\* Please confirm room door size (for equipment entry) and ceiling height

### Optional accessories applicable

21 CFR software